

ABSTRACT

THESIS: The Preservation of Historic, Single-Lane, Metal Truss Bridges in Hunterdon County, New Jersey: Issues, Concerns, and Techniques

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This study investigates the complex issues surrounding the preservation of historic, single-lane, metal truss bridges. Essentially functionally obsolete, these structures are targeted for replacement due to current government transportation policies, funding requirements, and safety concerns. After these issues are discussed, a series of case studies from Hunterdon County, New Jersey, will highlight multiple bridge rehabilitation projects in which designs and plans were modified to suit the unique situations and conditions of each of these structures, without compromising historic integrity and improving safety. These bridges have important cultural value, and although in some cases the original structure may be lost or wholly reconstructed, the historic character of the bridge and area is retained. This thesis illuminates the difficulties that need to be overcome in attempting to successfully preserve historic, single-lane bridges and their rural context (while maintaining transportation functionality), and illustrates the important role of community involvement in the preservation process.